

RELIABILITY DATA

LT1580 / 1581 / 1584 / 1585 / 1587

8/21/2006

• OPERATING LIFE TEST

| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HOURS ⁽¹⁾ AT +125°C | NUMBER OF ⁽²⁾ FAILURES |
|----------------|------------------|------------------|------------------|---|-----------------------------------|
| DD PACK TO-220 | 15 915 930 | 9542 9426 | 9542 0014 | 19.15 1,136.92 1,156.07 | 0 0 0 |

• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH

| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HOURS ⁽⁴⁾ AT +85°C | NUMBER OF FAILURES |
|----------------|------------------|------------------|------------------|--|--------------------|
| DD PACK TO-220 | 30 380 410 | 9708 9533 | 9722 9723 | 100.80 669.80 770.60 | 0 0 0 |

• PRESSURE COOKER TEST AT 15 PSIG, +121°C

| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HOURS | NUMBER OF FAILURES |
|----------------|---------------------------|------------------|------------------|----------------------------|--------------------|
| DD PACK TO-220 | 6,939 11,210 18,149 | 9441 9443 | 0617 0521 | 174.34 346.30 520.63 | 0 0 0 |

• TEMP CYCLE FROM -65°C to +150°C

| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE CYCLES | NUMBER OF FAILURES |
|----------------|----------------------------|------------------|------------------|----------------------------------|--------------------|
| DD PACK TO-220 | 17,973 15,997 33,970 | 9441 9504 | 0617 0521 | 1,783.30 1,609.70 3,393.00 | 0 0 0 |

• THERMAL SHOCK FROM -65°C to +150°C

| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE CYCLES | NUMBER OF FAILURES |
|----------------|-------------------------|------------------|------------------|----------------------------|--------------------|
| DD PACK TO-220 | 3,900 5,686 9,586 | 9533 9443 | 0617 0521 | 390.00 568.60 958.60 | 0 0 0 |

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 1.59 FITS

(3) Mean Time Between Failures in Years = 71,747

(4) Assumes 20X Acceleration from 85°C to +131°C

Note: 1 FIT = 1 Failure in One Billion Hours.